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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/049,985	02/20/2002	Valerio Aisa	108041-0009	2687

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EXAMINER	
LIEU, JULIE BICHNGOC	
ART UNIT	PAPER NUMBER
2612	

DATE MAILED: 09/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/049,985	AISA, VALERIO	
	Examiner	Art Unit	
	Julie Lieu	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 February 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *48-96* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This Office action is in response to Applicant's preliminary amendment filed February 20, 2002. Claims 1-46 have been canceled. New claims 47-96 have been added.

Specification

2. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

(a) TITLE OF THE INVENTION.
(b) CROSS-REFERENCE TO RELATED APPLICATIONS.
(c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
(d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT
(e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
(f) BACKGROUND OF THE INVENTION.
(1) Field of the Invention.
(2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
(g) BRIEF SUMMARY OF THE INVENTION.
(h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
(i) DETAILED DESCRIPTION OF THE INVENTION.
(j) CLAIM OR CLAIMS (commencing on a separate sheet).

(k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
(l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

3. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 94 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification fails to disclose that the information is sent to the network by a mobile phone.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 67 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 47- are rejected under 35 U.S.C. 102(e) as being anticipated by Sharood (US 20001/0025349).

Claim 47:

Sharood et al. (Sharood) discloses a monitoring device for monitoring a household electric user presenting an electric load, the monitoring device being connected between a source of electric energy and the electric load and including:

a. a detector 610 for determining at various time the quantity of electric power or current absorbed by the electric user 130;

b. a memory of control server 100 for retaining reference data or profiles of electric power or current that are absorbed during operating cycles of a corresponding type of electric user;

c. a processor 620 for determining status information that is representative of the present status or phase of operation of the household electric user based on the quantities of electric power or current determined by the detector and the stored reference values; and

d. communication means 630 for providing the status information to an external device (remote monitoring station).

See page 1, para. [0007] and page 5, paras. [0088] to page 6., para. [0091].

Claim 48:

The processor 620 in Sharood further determines efficiency information being representative of the efficiency or performance status of the household electric user based on the quantity of electric power or current determined by the detector and the stored reference values and the communication means provides the efficiency information to an external device.

Claim 50:

It is inherent that processor 100 in Sharood includes reference data for comparison to determine the operation stage of an appliance. It is also inherent that the reference data or profiles contained in the memory are representative of a theoretical level of absorption of electric power or current that the household electric user would absorb if operating correctly under normal conditions since the measured values must be compared to a preset value, which is considered as indication of normal conditions of an appliance.

Claim 51:

Processor 100 inherently compares the quantities determined by the detector with the reference data or profiles to determine the status in formation

Claim 52:

Processor 100 provides the status information to the memory.

Claim 54:

Sharood's system includes a communication means includes a connection to a communication bus 202, the communication means making the status information available to the bus and receiving instructions from the bus since communications between transmit circuitry 620 and control server 100 is bidirectional. See page 5, para. [0089].

Claim 55:

The communication means 630 is a connection to an external electronic apparatus, which is the remote server 100. The communication means providing the external electronic apparatus access to the status information and access to the programming of the device.

Claims 57 and 58:

Power plug 125 includes a switching device that operates under the control of the processor for interrupting the electric supply to the household electric user. processor 100 controls the switch based on instructions received over the bus. See page 6, para. [0094],

Claim 59:

Sharood discloses means for selecting, among a plurality of possible selections, the type of electric user that corresponds to the household electric user. See para. [0119].

Claim 60:

The memory in server 100 inherently contains a plurality of reference data or profiles relating to the operations of various types of electric user, and the configuration means selects the reference data or profile relating to the particular household electric user that is associated with the device.

Claim 63:

The Sharood system further includes a temperature sensor for sensing ambient temperature and the processor uses the sensed temperature to analyze the operations of the household electric user. See paras. [0100], [0133], and [0127].

Claim 65:

The signals for signaling anomalous conditions of operation of an appliance in Sherwood is acoustic and/or optical signaling. See paras. [0122]-[0124].

Claim 66:

The signals for signaling anomalous conditions of operation of an appliance in Sherwood is acoustic and/or optical signaling. See paras. [0122]-[0124]. It is inherent the that the

condition of the switch would also be transmitted to the server controller 100 as well as other information from plug 125

Claim 67:

Sharood discloses the use of external sensors such as gas, flood, or smoke sensor to provide information to server 100 so that the processor 100 can controls the switch to interrupt electric supply based, in part, on the readings of the external sensors. See paras. [0156], [0212], [0227], and [0228].

Claims 68, 69, 72-77, and 80-84:

The rejection for the combination of these claims recites the same rejection of claims 47-50-52, 54-55, and 57-60, 63, and 65-67.

Claim 85:

Sharood et al. (Sharood) discloses a system for monitoring and controlling household appliances that utilizes power from the electric mains, the system including:

a. one or more household appliances that communicate over a communication network 202;

b. one or more monitoring devices 125 for monitoring and controlling a corresponding number of second household appliances, each monitoring device communicating over the communication network on behalf of the associated second household appliance and including:

i. a detector 610 for determining at various time the quantity of electric power or current absorbed by the electric user 130;

ii. a memory of control server 100 for retaining reference data or profiles of electric power or current that are absorbed during operating cycles of a corresponding type of electric user;

iii. a processor 620 for determining status information that is representative of the present status or phase of operation of the household electric user based on the quantities of electric power or current determined by the detector and the stored reference data profiles; and

iv. a node (telephone node) for communicating on the communication network, the node providing status information over the network.

See page 1, para. [0007] and page 5, paras. [0088] to page 6., para. [0091]. Also see front-page figure.

Claim 86:

The monitoring device 125 in Sharood further determines efficiency information being representative of the efficiency or performance status of the household electric user based on the quantity of electric power or current determined by the detector and the stored reference profiles and the communication means provides the efficiency information over the network.

Claim 88:

It is inherent that processor 100 in Sharood includes reference data for comparison to determine the operation stage of an appliance. It is also inherent that the reference data or profiles contained in the memory are representative of a theoretical level of absorption of electric power or current that the household electric user would absorb if operating correctly under

normal conditions since the measured values must be compared to a preset value, which is considered as indication of normal conditions of an appliance.

Claim 89:

The system in Sharood further includes:

a. a meter for measuring electric power or current absorbed by the household, the meter communicating the measured household absorption values over the communication network;

b. and at each of the first household appliances limiting power or current absorption based on the communicated household absorption values and a predetermined maximum, absorption value; and

c. at each monitoring device limiting the power or current absorption by the as-associated second household apparatus based on the communicated household absorption values and a predetermined maximum absorption value.

See paras. [0200]-[0203].

Claim 91:

The communication network in Shawood's system is a power line carrier network.

Claim 92:

The monitoring device in Sharood's controls the activation and deactivation of the associated second household appliance based on information communicated over the communication network.

Claim 93:

The monitoring device in Sharood controls the second household appliance based on information provided to the network by an external device.

Claim 95:

The information in the Sharood system is supplied to the network from a remote network.

Claim 96:

The remote network in Sharood is the Internet.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. Claims 61, 64, 90, and 96 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sharood (US 20001/0025349).

Claim 61:

Sharood fails to disclose the use of manual control for the switch. Nonetheless, it would have been obvious for one skilled in the art to add this feature in the Sharood system because it would enhance the safety feature of the system since the system operator can shut the system down manually when a fault is discovered by the operator.

Claim 64:

The use of asynchronous serial communication line is conventional in the art. Thus, it would have been obvious to one skilled in the art to use such communications in Sharood's system because it is old and conventional in the art.

Claim 90:

The meter in Sharood communicate the household absorption value to the server. Sharood fails to clearly disclose the variable frequency of communications based on how close the measured household value is to predetermined maximum value. However, it would have been obvious to one skilled in the art to communicate the information whichever way one desired. This feature only presents a choice in design.

Claim 96:

The information in Sharood is supplied to the network by a telephone. Nonetheless, one skilled in the art would have been supplying the information to the network by a mobile telephone because the use of wireless mobile phone is conventional in the art.

13. Claim 62 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sharood (US 20001/0025349) in view of Nakamura (US Patent No. 5,019,935).

Claim 62:

Sharood fails to disclose a current differential sensor for detecting current leaks to ground and using the sensor readings to analyze the operation of the household electric user. However, such concept is very old in the art as taught in Nakamura, wherein a current sensor is used to sense the current differentials induced by an appliance fault. In light of this teaching, a skilled artisan would have readily recognized using a leakage current sensor in the Sharwood system because it would indicate an appliance fault which in turn indicate the performance or status of the appliance.

Allowable Subject Matter

14. Claims 49, 53, 56, 70, 71, 78, 79, 81, and 87 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

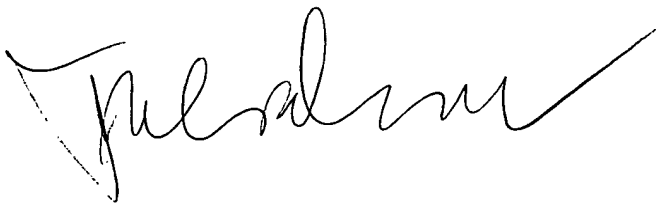
15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bogner et al., US. 5,680,445.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie Lieu whose telephone number is 571-272-2978. The examiner can normally be reached on MaxiFlex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on 571-272-3068. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Julie Lieu
Primary Examiner
Art Unit 2612

Aug. 22, 06